P91

Selected Annotations

Pregnancy and Diabetes

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Pregnancy and Diabetes

Selected Annotations

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PREGNANCY AND DIABETES:

SELECTED ANNOTATIONS

PREFACE

The National Diabetes Information Clearinghouse staff has prepared this bibliography on pregnancy and diabetes as an information resource for health care providers, health educators, patients and their families, and the public. No attempt has been made to assess the educational value of the items listed, and their inclusion does not imply endorsement by the National Institute of Arthritis, Metabolism, and Digestive Diseases. If an item has been previously evaluated, that information is included. The listing represents a selection of materials available on the subject of diabetes and pregnancy and is not intended to be exhaustive.

Since the Clearinghouse does not distribute materials, please contact the source indicated. Journal articles may be located with the assistance of a local library or a medical library. Your comments and inquiries and also additional materials on the subject are welcomed. Please send these to the following address:

National Diabetes Information Clearinghouse
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EXPLANATORY NOTES

1. The format for bibliographic citations generally follows National Library of Medicine bibliographic practices or those of American National Standard for Bibliographic References.

2. Unsigned abstracts have been prepared by NDIC staff. Sources of other abstracts are indicated by the following abbreviations:

AA	Author abstract
AVLINE	Audio Visuals On-Line, National Library of Medicine
ERG	Educational Resources Group
UM	University of Michigan, Learning Resource Center and Diabetes Research and Training Center, Audiovisual Resources for Diabetes Education. 2d ed. Ann Arbor: The University, 1980.
-M	Abstract modified by Clearinghouse staff

3. Abbreviations Used in Citations:

[anon.]:	Author unknown
b&w:	Black and white
[n.d.]:	Date unknown
sd:	Sound

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PREGNANCY AND DIABETES

PUBLIC AND PATIENT RESOURCES

Print Materials

1. Baby Talk. S. G. Gabbe; B. H. Gingerich. Diabetes Forecast. 31(1): 30-31, 42; January-February 1978.

   Answers are given to frequently asked questions about pregnancy and diabetes. The risks to the mother during pregnancy and to the baby before and after birth are considered, and suggestions are made for reducing these risks. Fetal monitoring procedures used to determine the date and method of delivery are described.

2. Baby Team: A Positive Approach to Pregnancy with Diabetes. D.R. Coustan; S. Garvey. St. Louis: Monoject; 1979. 126 p.

   Written for prospective parents, the book emphasizes the role of the parents and the medical team in the successful management of a diabetic pregnancy. Among the topics discussed are diet, possible required hospitalization, insulin adjustments, urine and blood glucose testing, and special tests that may be administered. A glossary of terms and a weekly diary for the prospective mother to record test results, physician instructions, and personal notations are included. The book was written by a physician who specializes in high-risk obstetrics and a nurse-educator who has herself had a successful diabetic pregnancy.

   Price: $2.50.

   Source: Monoject; Division of Sherwood Medical Dept. TI; 1831 Olive Street; St. Louis, MO 63103. (314) 621-7788.

3. Diabetes and Pregnancy. J. Brooks; J. Hamman; et al. Ann Arbor: University of Michigan; 1978. 32 p.

   The effects of diabetes on pregnancy are described, with emphasis on the special care required to maintain good control. Steps to take to keep diabetes in good control, special tests that may be performed, and procedures that may follow the birth of the baby are outlined. A glossary of terms is provided.

   Price: Write for complete information.

   Source: Michigan Diabetes Research and Training Center; The University of Michigan; Nursing Services; University Hospital; Ann Arbor, MI 48109. (313) 763-4156.

4. Diabetes and Pregnancy: A Guide for the Prospective Mother with Diabetes. A. L. Graber; B. G. Christman; V. B. Rawlings; F. H. Boehm. Nashville: Vanderbilt University Press; 1973. 80 p.

Guidelines and practices that can help ensure a successful outcome to a diabetic pregnancy are emphasized in the booklet. Topics include obstetrical considerations for the diabetic pregnancy, the administration of insulin, and the role of diet and nutrition. Pregnant and nonpregnant states are compared in terms of daily management and appropriate response to signs of glycosuria, ketoacidosis, or infection. The tendency of pregnancy to cause problems with the management of diabetes is noted.

Price: $2.95.

Source: Vanderbilt University Press; 2505 (Rear) West End Avenue; Nashville, TN 37203. (615) 322-3585.

5. Having Children . . . A Guide for the Diabetic Woman. R. Hausknecht. New York: Juvenile Diabetes Foundation; [n.d.]. 12 p.

Planning a pregnancy, choosing a medical team, the effects of diabetes on pregnancy and of pregnancy on diabetes, the method of delivery, and breast feeding are several of the subjects discussed in the pamphlet. Careful control of diabetes and close monitoring of both diabetes and pregnancy are emphasized.

Price: Free/1; $10.00/100.

Source: Juvenile Diabetes Foundation; 23 East 26th Street; New York, NY 10010. (212) 889-7575.

6. Having Our Baby. M. Ackerman. Diabetes Forecast. 31(1):32-35; January-February 1978.

The diary of a mother with insulin-dependent diabetes records the history of her pregnancy from diagnosis through induced natural childbirth. Dietary and insulin adjustments, tests administered to monitor the mother and fetus, and the successful delivery are described.

7. How Chronic Health Problems Affect Pregnancy. U. Rooinsky. Chicago: The American College of Obstetricians and Gynecologists; [n.d.]. 6 p.

Suggestions are given for the pregnant woman with a chronic disease. The measurement of estriol in the management of expectant mothers with diabetes is discussed.

Price: $10.00/100. Order No.: R-11.

Source: The American College of Obstetricians and Gynecologists; Suite 2700; One East Wacker Drive; Chicago, IL 60601. (312) 222-1600. Attention: Publication Department.

8. I'm 19, Pregnant, and Scared: Will Diabetes Ruin My Life? F. Guest. Atlanta: Grady Memorial Hospital; [n.d.]. 4 p.

The personal story of a young woman diagnosed as diabetic after becoming pregnant focuses on the psychological adjustments required to deal successfully with the necessary treatment regimen. The role of the hospital team and her growing awareness and acceptance of her condition are emphasized.

Price: Write for complete information.

Source: Health Education Department; Maternal and Infant Care Project; Grady Memorial Hospital; 80 Butler Street, S.E.; Atlanta, GA 30303. (404) 588-4910.

9. Nutritional Counseling for the Pregnant or Gestational Diabetic. M. Hollands. Toronto: Canadian Diabetes Association; 1975.

Physiological changes occurring during pregnancy that affect the nutritional needs of a woman with diabetes are discussed. Suggestions are given on meal planning, breast feeding, and weight control.

Price: Free.

Source: Canadian Diabetes Association; 123 Edward Street; Suite 601; Toronto, Ontario M5G1E2. (416) 593-4311.

10. Planning for Sex, Marriage, Contraception, and Pregnancy. A. L. Graber; B. Christman; F. H. Boehm. Diabetes Care. 1(3):202-203; May-June 1978.

Dating, sexual activity, marriage, contraception, and pregnancy are discussed in relation to diabetes management. Professional counseling is encouraged as part of pregnancy planning. The need to stabilize diabetes and monitor it from conception through delivery is stressed. Considerations in planning a pregnancy include the age of the mother with diabetes, the duration of her disease, and her control of both diabetes and weight.

11. Pregnancy and Birth Control. In: Understanding Diabetes. L. Silvian. New York: Monarch Press; 1977; pp. 88-93.

The risks and special needs imposed by pregnancy on the woman who is diabetic are summarized. Many tests are needed before a physician

can initiate an individualized management program. For this reason, a medical center with extensive facilities for diabetic as well as obstetric care is recommended. Different forms of contraception are discussed with emphasis on how they may affect diabetes. The White classification chart for diabetic pregnancy is included.

Price: $2.95.

Source: Monarch Press; 1230 Avenue of the Americas; New York, NY 10020. (212) 245-6400.

12. Pregnancy and Diabetes. In: So You Have Diabetes! L. A. Distiller. Lancaster: MTP Press; 1980; pp. 61-66.

The effects of metabolic changes during pregnancy which may contribute to the development or worsening of the diabetic state are outlined, and the variation in these effects as the pregnancy progresses is discussed. The need for family planning is examined.

Price: Write for complete information.

Source: MTP Press Limited; Falcon House; Lancaster, ENGLAND.

13. Pregnancy and Diabetes. M. S. Kreitzer. Hackensack: New Jersey Affiliate; 1978. 6 p.

Good diabetic control is emphasized as a means of improving the outcome of a diabetic pregnancy. Education, proper diet, weight control, and close supervision by a doctor are recommended.

Price: $0.10.

Source: American Diabetes Association; New Jersey Affiliate, Inc.; American Red Cross Building; 345 Union Street; Hackensack, NJ 07601. (201) 487-7228.

PREGNANCY AND DIABETES

PUBLIC AND PATIENT RESOURCES

Nonprint Materials

14. Diabetes and Pregnancy [Videorecording]. [anon.]. Columbus, GA: American Learning Systems; [n.d.]. 1 cassette, 20 min.; sd.; color; 3/4 in.

The fact that women with diabetes can have healthy babies even though pregnancy makes diabetes more difficult to control is stressed. More frequent urine tests and blood tests are necessary during pregnancy to detect hypoglycemia and diabetic acidosis in the early stages. The causes, symptoms, and treatment of both conditions are discussed. Support from the father is emphasized. The preferred use of the dip-stick method of urine testing over the use of Clinitest tablets in the last 3 months of pregnancy is explained. Special adjustments for pregnant women with diabetes include more frequent visits to a physician and 24-hour urine specimens during the last 3 months of pregnancy. Two brief self-tests are presented for the patient. (UM)

Price: Write for rental and purchase information.

Source: American Learning Systems; 1932 Wynnton Road; Columbus, GA 31902. (404) 327-2619.

15. The Mental Health Needs of Women with Medically High Risk Pregnancies [Videorecording]. B. Colwell; C. Krone. Ann Arbor: University of Michigan Medical Center, Biomedical Media Production Unit; 1978. 1 cassette; 25 min.; sd.; color; 3/4 in.

The mental health needs of women with medically high risk pregnancies are discussed. Two women with diabetes discuss the diabetes-associated complications of their pregnancies. One, a 29-year-old brittle diabetic, expresses concern that she no longer has control over her disease and guilt that the child may be abnormal. The second discusses the loss of her child due to gestational diabetes. Both women describe the psychological burden precipitated by their conditions. (UM)

Price: Loan: $25.00/week; Sale: $125.00.

Source: University of Michigan; Department of Postgraduate Medicine, Media Library; Towsley Center for Continuing Medical Education; Box 57; Ann Arbor, MI 48109. (313) 763-2074.

16. Assessors of Fetal Perinatal Mortality in Diabetic Pregnancy: Analysis of 1,332 Pregnancies in the Copenhagen Series, 1946-1972. J. Pedersen; L. Molsted-Pedersen; B. Andersen. Diabetes. 23(4):302-305; April 1974.

In a series of 1,332 pregnancies in women with diabetes, perinatal fetal mortality varied to a statistically significant degree, with maternal factors and pregnancy complications expressed, respectively, by the White and PBSP (Prognostically Bad Signs in Pregnancy) classifications. Also, mortality declined steadily over the years 1946 to 1972. Fetal congenital malformation was the most important single cause of perinatal death in recent years. It is recommended that, in a controlled trial, the year of admission be taken into account along with the White and PBSP classifications. With the prevailing low and decreasing mortality, even large centers may be unable to fulfill the requirements as to sample size within a few years. Therefore, criteria other than perinatal mortality may be needed to assess the value of changes in treatment. (AA)

17. Birth Weight, Gestational Age, and Perinatal Deaths in 5,471 Infants of Diabetic Mothers. A. F. North, Jr.; S. Mazumdar; V. M. Logrillo. Journal of Pediatrics. 90(3):444-447; March 1977.

This study examines statistically the interrelationships of birth weight, gestational age, and fetal and neonatal deaths for a group of 5,471 singleton infants of white mothers with diabetes for the years 1958 through 1969. Comparison is made with 2,000,688 singleton infants of nondiabetic white women born during the same period. Results are compared with similar studies and the following conclusions are drawn: an excess of high birth weights was found in both stillborn and liveborn infants of diabetic mothers at all gestational ages; the fetal death rate for infants of diabetic mothers was 10.4 times that of infants born to nondiabetic mothers; 81 percent of 1,000 infants of diabetic mothers survived at least 28 days after birth, compared to 97.4 percent of 1,000 infants born to nondiabetic mothers. (AA-M)

18. Carbohydrate and Lipid Metabolism During Normal Pregnancy: Relationship to Gestational Hormone Action. R. K. Kalkhoff; A. H. Kissebah; H. Kim. Seminars in Perinatology. 2(4):291-307; October 1978.

The scientific literature on the influence of hormonal changes on carbohydrate and lipid metabolism during normal pregnancy is reviewed. The effects on pancreatic beta and alpha cells and consequent changes in insulin and glucagon secretion are discussed. During the first half to two-thirds of pregnancy, the placental steroids accentuate maternal storage of nutrients such as glycogen and fat in the liver, adipose tissue, muscle, uterus, and breast. In the last trimester, storage stabilizes and fuel is mobilized to an exaggerated degree, causing diabetogenic stress and slow maternal glucose assimilation. Metabolic changes relevant to diabetic pregnancy and its management are noted at numerous points in the review.

19. Carbohydrate Metabolism in Pregnancy and the Newborn. H. W. Sutherland; J. M. Stowers, eds. Edinburgh: Churchill Livingstone; 1975. 320 p.

The book incorporates the proceedings of an international colloquium held at Aberdeen, Scotland, in July 1973. The 15 presentations include papers on the physiology of pregnancy, the fetal endocrine pancreas, characteristics of infants of mothers with diabetes, detection of diabetes during pregnancy, diabetes management during pregnancy, and care of the mother and infant following a diabetic pregnancy.

Price: $28.00.

Source: Churchill Livingstone, Inc.; 19 West 44th Street, Suite 301; New York, NY 10036. (212) 921-0430.

20. Carbohydrate Metabolism in Pregnancy and the Newborn: 1978. H. W. Sutherland; J. M. Stowers, eds. New York: Springer-Verlag; 1979. 540 p.

This book is based on 35 papers presented at the second Aberdeen colloquium on carbohydrate metabolism in pregnancy and the newborn, held in April 1978. Many of the presentations focus on diabetic pregnancy, particularly the work of the diabetic pregnancy study group of the European Association for the Study of Diabetes. Topic areas include: metabolic changes; placental structure, function, and blood flow; endocrine pancreas; fetal nutrition; fetal monitoring; fetal anomalies; symptomatic diabetes; asymptomatic diabetes; and maternal weight. References follow each presentation, and a subject index is provided.

Price: $32.50.

Source: Springer-Verlag New York, Inc.; 175 Fifth Avenue; New York, NY 10010. (212) 477-8200.

21. Classification of Obstetric Diabetes. P. White. American Journal of Obstetrics and Gynecology. 130(2):228-230; 15 January 1978.

This paper briefly summarizes management problems in obstetric diabetes from 1898 to the present. Prior to the availability of insulin treatment, pregnancy in women with overt diabetes was rarely reported. Even with insulin, the infant survival rate in pregnancies managed at the Joslin Clinic from 1924 to 1938 was only 54 percent. With improved monitoring techniques, removal of sex hormone therapy from the regimen of pregnant women with diabetes, and the use of classification systems (including the author's) in the management of pregnancies, the infant survival rate has been brought up to that of the hospital as a whole.

22. Complications in Pregnancy and Fetal Development. B. E. Metzger. In: B. Hamburg; L. Lipsett; et al., eds. Behavioral and Psychosocial Issues in Diabetes: Proceedings of the National Conference. Bethesda: National Institutes of Health; 1980; pp. 199-204.

The close correlation between the quality of maternal care achieved during a diabetic pregnancy and the outcome of the pregnancy is emphasized. Management of the pregnancy by a team of specialists at a medical center can reduce the risks of diabetic complications, fetal or perinatal loss, and most neonatal morbidities. The pregnant woman with diabetes may need special support in coping with the psychosocial stresses of the pregnancy, particularly those imposed by the demands of the treatment program.

Price: $7.00. Order No.: GPO-017-045-0097-1.

Source: Superintendent of Documents; U.S. Government Printing Office; Washington, DC 20404. (202) 783-3238.

23. Congenital Malformations; The Possible Role of Diabetes Care Outside Pregnancy. J. Pedersen; L. Molsted-Pedersen. In: Pregnancy Metabolism, Diabetes, and the Fetus. Ciba Foundation Symposium 63 (new series). Amsterdam: Excerpta Medica; April 1979; pp. 265-271.

A consecutive and prospective series of 949 newborn infants of diabetic mothers treated during pregnancy and delivery in the period 1966-1977 was analyzed. The malformation rate was 8.2 percent. As compared to infants of mothers (White classes B-F alone) controlled

outside pregnancy elsewhere, the rate of malformations was significantly reduced (from 14.1 to 7.4 percent) in infants whose mothers attended two hospitals specializing in the treatment and ambulatory control of diabetes. For mothers with diabetes not controlled at a diabetic center outside pregnancy, the malformation rate was 9 percent in classes B and C and 19.4 percent in classes D and F, compared to 6.2 and 8.5 percent, respectively, for those who were controlled. The rates of malformation (total as well as severe alone) were significantly reduced in infants of White's classes D and F, and insignificantly reduced in classes B and C (in class A no comparison could be made). The findings indicate that poor diabetic control outside pregnancy is teratogenic, although the "disastrous malformation factor" of diabetes appears not to be totally dependent on the degree of compensation of the diabetic metabolism, as measured by the variables usually applied. (AA)

Price: $39.50.

Source: Elsevier-North Holland Publishing Co.; 52 Vanderbilt Avenue; New York, NY 10017. (212) 867-9040.

24. Dependency, Anger, and Denial in Pregnant Women: A Group Approach. C. P. Leeman. Psychiatric Quarterly. 44(1):1-12; January 1970.

The effects of group discussion on women with diabetes attending a clinic for prenatal care are analyzed. Approximately half of the subjects had lost a baby previously; one had lost five and had no living children. In general, the author concludes that the women felt defective, isolated, helpless, and guilty, but denied these feelings. They developed an overdependency on their doctors. Several patients were able to cope better with their problems after attending the clinic.

25. Diabetes and Other Endocrine Disorders During Pregnancy and in the Newborn: Proceedings of a Symposium held in New York City, April 1976. M. I. New; R. H. Fiser, eds. New York: Riss; 1976. 262 p. (Progress in Clinical and Biological Research, v. 10).

Presentations from this symposium fall into four major categories: diabetes and carbohydrate regulation, gonadotropins and growth factors, steroid hormones, and thyroid and parathyroid hormones. Each presentation concerns a particular aspect of each of these general subject areas in relation to diabetic pregnancy. Other topics discussed include genetic counseling, insulin and fetal growth, and progestogens in pregnancy.

26. Diabetes and Pregnancy. L. Molsted-Pedersen; M. Osler, eds. Copenhagen: Acta Endocrinologica; Supplementum 182; 1974.

This book consists of a series of papers dedicated to Jorgen Pedersen, a leading authority on diabetes and pregnancy, in honor of his 60th birthday. Topics include screening for diabetes mellitus in pregnant women, contraception in diabetic patients, and hemoglobin F in newborn infants of diabetic mothers. Works of a more biochemical nature deal with serum progesterones, human chorionic somatomammotropin, and estriol excretion in relation to pregnancy in diabetes.

27. Diabetes in Pregnancy. B. E. Metzger; R. L. Phelps; N. Freinkel. In: L. J. DeGroot; G. F. Cahill Jr.; et al., eds. The Metabolic Basis of Endocrinology. Vol. 2. New York: Grune and Stratton, Inc.; 1979; pp. 1075-1083.

This chapter reviews the current information pertaining to maternal metabolism and clinical management of diabetes during pregnancy. The role of the placenta as an insulin-degrading structure, an endocrine organ, and a site for removing maternal fuels is considered together with the ways in which the mother alters her metabolism to accommodate these functions. Principles of treatment for both insulin-dependent diabetes and gestational diabetes are discussed in terms of diet, insulin administration, outpatient management, and hospitalization. This discussion is limited to those neonatal problems that relate directly to maternal metabolism and diabetic control.

Price: $77.50.

Source: Grune and Stratton, Inc.; 40 Academic Press; 111 Fifth Avenue; New York, NY 10003. (212) 741-6800.

28. Diabetes in Pregnancy: Metabolic Changes and Current Management. D. M. Jouganatos; S. G. Gabbe. Journal of the American Dietetic Association. 73(2):168-171; August 1978.

The present management of the patient with diabetes during pregnancy has led to great improvement in perinatal survival. The reasons for this improvement are meticulous control of diabetes, careful timing of delivery, and intensive care of the infant during and after birth. Dietary management plays an important role in diabetic control during pregnancy. (AA-M)

29. Diabetes Insipidus and Pregnancy. Case Report, Incidence and Review of Literature. M. C. Hime; J. A. Richardson. Obstetrical and Gynecological Survey. 33(6):375-379; June 1979.

The coexistence of diabetes insipidus (D.I.) and pregnancy is rare. Sixty-seven cases are reviewed, including one managed by the authors.

The condition tends to become worse in pregnancy. Labor appears unaffected, and lactation appears to lead to an improvement in D.I. Theories are discussed to account for the effect of pregnancy on diabetes. (AA)

30. Diabetes Insipidus in Pregnancy: A Case Review. J. P. Phelan; A. T. Guay; C. Newman. American Journal of Obstetrics and Gynecology. 130(3): 365-366; February 1978.

The case report of a woman who developed diabetes insipidus secondary to trauma during her first pregnancy is presented. Along with general concepts regarding diabetes insipidus, its effects on this pregnancy and the patient's subsequent pregnancies are discussed. (AA-M)

31. Diabetes Mellitus in Pregnancy. J. W. Hare. Comprehensive Therapy. 3(11):23-28; November 1977.

Diabetes may become evident during pregnancy or, if it already exists, may become more difficult to control. The changing insulin requirements and propensity for ketoacidosis require weekly visits to a physician and careful urine testing on a daily basis. In addition, microvascular complications of diabetes must be carefully monitored. The delivery date is planned according to White's diabetic class, with earlier dates chosen when there are diabetic complications. Hospitalization is necessary one week before anticipated delivery. Urinary estriol tests, OCT, amniocentesis, and ultrasound are all helpful in managing the pregnancy. Delivery of the fetus and placenta results in a profound fall in the insulin requirement. The neonate should be carefully observed during the first few days of life because of the frequency of complications. (AA-M)

32. Diabetic Pregnancy: Management of Diabetes on the Day of Delivery. N. G. Soler; J. M. Malins. Diabetologia. 15(6):441-446, December 1978.

An insulin regimen for management of the insulin-dependent diabetic on the day of delivery is described. Pregnant women with diabetes were fasted on the day of delivery and infused with 10 g glucose per hour throughout labor and after delivery until normal eating was resumed. In the morning, a fixed dose of intermediate acting insulin (NPH 24 units) was administered subcutaneously at 8:00 A.M. This dose was found suitable for women whose insulin requirements during pregnancy ranged from 60 to 250 units/day. The regimen worked satisfactorily both under close study conditions and also when used routinely and was equally applicable to the diabetic scheduled for induction or for elective cesarian section. It was associated with an 8 percent incidence of fetal distress among women who were induced.

Neonatal hypoglycemia affected 19 percent of all infants, the incidence rising from less than 10 percent among infants of women with the best control to 41 percent among infants of women with the worst control. No cases of maternal hypoglycemia during or after delivery were recorded. (AA)

33. The Diabetic Pregnancy: A Perinatal Perspective. I. R. Merkatz; P. A. I. Adam, eds. New York: Grune and Stratton, Inc.; 1979. 267 p.

The book comprises 19 presentations by various researchers and practitioners on the complex interactions between diabetes mellitus during pregnancy and the long-term health considerations for the mother, fetus, and newborn infant. The contributions are organized into three topical areas: (1) metabolic and clinical considerations for the mother; (2) the effects of maternal diabetes on the placenta and fetus; and (3) biochemical, physiologic implications for the neonate. Specific topics include gestational metabolism, maternal nutrition, management of diabetic complications, psychosocial implications of the diabetic pregnancy, the effect of insulin on fetal growth, neonatal care, calcium disturbances, and the genetics of diabetes. References, figures, and other illustrations are also included.

Price: $29.50.

Source: Grune and Stratton, Inc.; 111 Fifth Avenue; New York, NY 10003. (212) 741-6800.

34. Diabetic Retinopathy and Pregnancy. J. Cassar; E. M. Kohner; et al. Diabetologia. 15(2):105-111; August 1978.

Diabetic retinopathy was found to be present in 12 out of a group of 67 diabetic patients supervised during 92 pregnancies and in 3 other pregnant women with diabetes referred because of retinopathy. The mean duration of diabetes was 13 years (range 3-25 years). Nine patients had minimal retinopathy, two had background retinopathy, and the remaining four had proliferative retinopathy. The cases with minimal retinopathy showed no progression during pregnancy. One patient with background retinopathy showed deterioration. Of the four patients with proliferative retinopathy, one showed regression during the pregnancy, two showed advances and were treated with photocoagulation (these two patients now have normal vision), while the patient with extensive retinitis proliferans, with retinal detachment in both eyes and previous photocoagulation, remained unchanged. The prognosis during pregnancy for patients with diabetic retinopathy has been improved by the advent of photocoagulation. (AA-M)

35. Effects of Diabetes Mellitus on Endocrinologic and Metabolic Adaptations of Gestation. B. E. Metzger; N. Freinkel. Seminars in Perinatology. 2:309-318; 1978.

This paper reviews current data on the alterations in maternal metabolism of glucose and other metabolic fuels that may mediate the changes in growth, development, and metabolism of the fetus in diabetic pregnancy. Influences of genetic factors, pancreatic islet secretion, insulin resistance, and gestational hormones on the pathogenesis of gestational diabetes are discussed. Evidence is presented to indicate that subtle disturbances in diurnal profiles of all metabolic fuels, carbohydrates, free fatty acids, triglycerides, and amino acids occur during gestational diabetes, and these are exaggerated during pregnancy in overt diabetes. The implications for fetal development are noted, emphasizing the improvement in fetal survival that has developed over the last decade as a result of rigid control measures during pregnancy and new obstetric techniques.

36. Effect of Maternal Diabetes on Congenital Malformations. C. S. Chung; N. C. Myrianthopoulos. In: D. Bergsma, ed. Factors Affecting Risks of Congenital Malformations. New York: Stratton Intercontinental Medical Book Corporation; 1975; pp. 22-35.

Evidence for an adverse effect of maternal diabetes on congenital malformations in offspring is accumulating, but controversy exists as to whether these results represent a biased estimate due to more thorough examination of children of diabetic women or are related to effects of insulin therapy rather than the disease itself. This study attempts to answer these questions and determine if the effect is specific to identifiable variables, is race-related, and is genetic or maternal. The outcome of 23,695 pregnancies of white mothers and 24,742 pregnancies of black mothers was investigated. Results indicated no increase in malformation risk in mothers with gestational diabetes in either racial group. The risk in white mothers with overt diabetes was double, and there was a small increase in risk for black mothers with overt diabetes, but only in major malformations. Multiple malformations occurred more frequently in the group with overt diabetes, suggesting that the effect is exerted at an early developmental stage. Insulin therapy and paternal diabetes had no effect, whereas duration of maternal diabetes had a significant effect. Thus, it appears that maternal diabetes through its adverse effects on maternal metabolism is the responsible factor for the increase in malformation in the offspring.

Price: $12.50.

Source: Stratton Intercontinental Medical Book Corporation; 381 Park Avenue South; New York, NY 10016. (212) 683-5089.

37. The Influence of Hormonal Changes of Pregnancy on Maternal Metabolism. R. K. Kalkhoff; H-J. Kim. In: Pregnancy Metabolism, Diabetes, and the Fetus. Ciba Foundation Symposium 63 (new series). Amsterdam: Excerpta Medica; April 1979; pp. 29-55.

Mammalian pregnancy is characterized by progressive hyperinsulinemia, raised plasma lipids, and increased vulnerability to ketosis after food deprivation. The present investigations were performed to assess the role of two placental steroids, estradiol and progesterone, in the development of these changes, since plasma titers of these hormones progressively increase during human gestation. In both human subjects and adult female rats it was demonstrated that these two steroids, separately or in combination, augment plasma insulin concentration in vivo, cause hypertrophy of pancreatic islets, and promote exaggerated secretion of insulin, but not glucagon, by pancreatic islets in vitro. The combined regimen also increased hepatic glycogen storage and suppressed gluconeogenesis in vivo in the rat while accelerating the onset of ketosis during starvation in human subjects and in the animal model. Estradiol and progesterone appear to effect metabolic changes in nonpregnant animals and human subjects that simulate maternal adaptations to advancing gestation, including altered endocrine pancreatic function, triglyceride metabolism, and metabolic fuel storage and mobilization. (AA-M)

Price: $39.50.

Source: Elsevier-North Holland Publishing Co.; 52 Vanderbilt Avenue; New York, NY 10017. (212) 867-9040.

38. Information Sheets on Diabetes and Pregnancy. [anon.]. Cleveland: Diabetes Association of Greater Cleveland; 1977. 1 p.; 2 pp.

The nine information sheets relating to diet and nutrition during the diabetic pregnancy cover the following topics: diabetes diet prescription during pregnancy; distribution and percentages of calories for the six food groups (separate sheets for 2200, 2400, and 2700 calories); a bibliography on pregnancy and diabetes; recommended food exchanges according to caloric intake; nutrition in the diabetic pregnancy; information for the nutritionist; and a meal plan. The sheets are designed for use by dietitians, nutritionists, and other professionals involved in patient education.

Price: Free/1; $0.10 each/2 or more. Order each topic separately.

Source: Diabetes Association of Greater Cleveland; 2022 Lee Road; Cleveland, OH 44118. (216) 371-3301.

39. Malformations in Infants of Diabetic Mothers Occur Before the Seventh Gestational Week. J.L. Mills; L. Baker; A.S. Goldman. Diabetes. 28: 292-293; April 1979.

Using a developmental morphologic approach, the authors studied the incidence and timing of congenital malformations in infants of mothers with diabetes. The results demonstrated that the more common anomalies occurred before the seventh week of gestation. While the study did not identify the cause of malformations and was not designed to do so, its results emphasize the critical importance of early recognition of diabetes in pregnant women and skillful diabetic management during the first two months of gestation. Careful monitoring of all women with diabetes of childbearing age and rapid diagnosis of pregnancy are also recommended.

40. Maternal Diabetes Mellitus and Congenital Malformation. Survey of 205 Cases. R. E. Day; J. Insley. Archives of Diseases in Childhood. 51(12):935-938; December 1976.

Twenty-five out of 205 babies (12 percent) born to diabetic mothers in the Birmingham Maternity Hospital in the period 1969-1974 were malformed as against 6 percent in a control group. The incidence was highest in the group where mothers were on insulin at the time of conception (17 out of 117, or 15 percent). No correlation was observed between major malformation in this group and age of onset or duration of the diabetes, progressive vascular complications, maternal age, or parity. Cardiovascular malformations were overrepresented. (AA)

41. Management of Diabetes Mellitus in Pregnancy. Committee on Technical Bulletins. Chicago: American College of Obstetricians and Gynecologists; 1978. 4 p.

Problems in managing diabetes during pregnancy are described. Detection of diabetes in pregnancy, assessment of the risks, and general principles of care are among topics considered. The White classification system of obstetric diabetes is also outlined.

Price: $6.25/25.

Source: American College of Obstetricians and Gynecologists; Suite 2700; One East Wacker Drive; Chicago, IL 60601. (312) 222-1600. Attention: Publication Department.

42. The Outcome of Diabetic Pregnancies in Relation to the Mother's Blood Sugar Level. K. Karlsson; I. Kjellmer. American Journal of Obstetrics and Gynecology. 112(2):213-220; 15 January 1972.

A 10-year study of diabetic pregnancies was analyzed. The mean blood sugar level during the last weeks of pregnancy was calculated for each

woman and used as an index of the control of the mother's disease. The perinatal mortality rate sank from 23.6 percent in the group with a mean blood sugar level above 150 mg per 100 ml to 15.3 percent in the intermediate group down to 3.8 percent in the group with mean blood sugar levels below 100 mg per 100 ml. The increased survival rate was paralleled by a decreased morbidity in the infants. The incidence of severe malformations in the total series is 11 percent. Long-standing diabetes and diabetes with angiopathy carries a greater risk of malformations (up to 25 percent). Two circumstances are stressed: the active management of the pregnant diabetic subject with the goal to reduce the mean blood sugar value below 100 mg per 10 ml and the active management of the newborn infant with the early supply of fluid and calories. (AA)

43. Pregnancy and Diabetes. B. E. Hazlett; A. B. Kenshole. Primary Care. 4(4):643-650; December 1977.

Diabetic pregnancy is no longer the universal tragedy for mother and child it once was, but avoidable fetal loss will continue to occur unless gestational diabetes is detected and unless meticulous control of the insulin-dependent pregnant woman is maintained. (AA-M)

44. Pregnancy Complicated by Diabetes Mellitus in Private Practice: A Review of Ten Years. R. S. Corwin. American Journal of Obstetrics and Gynecology. 134(2):156-161; 15 May 1979.

Two hundred private diabetic patients delivered of their infants (202) in a private hospital were evaluated for a 10-year study period (1968 to 1977). There were no maternal deaths. An 88 percent overall survival rate of viable infants compared favorably with that of other reported series. Analysis of each of the 10 years demonstrated marked changes in management and consequent changes in fetal survival, morbidity, and mortality rates. No neonatal deaths occurred during the last 3 years of the study period and the mortality rate in viable infants was 6.8 percent. There has been no significant temporal change in the incidence of toxemia or hydramnios. Fifteen stillbirths and 10 neonatal deaths were analyzed to identify significant correlates of infant mortality. Attention is directed to sex ratios (male: female) of 3:1 for stillbirths and 3:2 for infants affected with respiratory distress syndrome. Conservative use of accessory testing and antepartum hospitalization was obvious. The question of the necessity for expensive and intensive regimented institutional management is addressed. A minimum management regimen is proposed to be used in conjunction with the private obstetrician's clinical judgment and expertise. (AA)

45. Pregnancy in Diabetes Complicated by Vascular Disease. J. W. Kare; P. White. Diabetes. 26(10):953-955; October 1977.

Over 30 years of experience with pregnancy in women with diabetes is reviewed. In particular, the maternal and fetal survival in mothers with either microvascular or macrovascular disease is considered. This includes White classes R, F, R, RF, H, and T. In this group of patients with vascular disease, maternal survival during pregnancy is virtually 100 percent with the exception of class H (ischemic heart disease). Fetal survival has steadily improved throughout the time period examined, but is still considerably below that of pregnancies occurring in women without vascular disease. (AA)

46. Pregnancy Metabolism, Diabetes, and the Fetus. Symposium on Pregnancy Metabolism, Diabetes, and the Fetus, London, 1978. Ciba Foundation Symposium 63 (new series). Amsterdam: Excerpta Medica; April 1979. 326 p.

Symposium participants examined the interrelationship between maternal metabolism and fetal metabolism in diabetic pregnancy. The discussions focused on the influence of the mother's hormonal changes on her metabolism and on fetal growth, particularly during the first months of pregnancy. The possible link between maternal metabolic disturbances and fetal abnormality was considered. The presentations included discussions of the transfer of fatty acid across the placenta, the influence of preconceptional glucose values on pregnancy outcome, congenital anomalies, and clinical perspectives in the care of the pregnant woman with diabetes.

Price: $39.50.

Source: Elsevier-North Holland Publishing Co.; 52 Vanderbilt Avenue; New York, NY 10017. (212) 867-9040.

47. The Pregnant Diabetic and Her Newborn: Problems and Management. J. Pedersen. 2d ed. Baltimore: Williams and Wilkins; 1977. 280 p.

Biochemical interactions in pregnancy in women with and without diabetes, the complications of diabetes and pregnancy, and the possibilities for one condition to complicate the other are discussed in detail. Screening of women who are potentially diabetic and close monitoring of the mother and fetus by a team of physicians throughout the pregnancy, including up to 8 weeks in-hospital from the 32nd week, have been shown to reduce perinatal mortality. Contraindications for pregnancy such as nephropathy and/or proliferative retinopathy indicate that survival of the infant is improbable or that malformation or cerebral dysfunction is likely. Treatment varies with the diabetes classification and the stability of the patient, but in all cases the blood sugar must be kept as close to normal as possible. Normoglycemia is easily destabilized by complications of pregnancy such as

toxemia. Initiative on the physician's part in helping the patient prepare for a planned pregnancy or in advising contraception or sterilization where pregnancy is contraindicated is stressed.

Price: $29.95.

Source: Williams and Wilkins; 428 East Preston Street; Baltimore, MD 21202. (301) 528-4221.

48. Psychologic and Social Implications of Scientific Care for Pregnant Diabetic Women. R. B. Merkatz; K. Budd; I. R. Merkatz. Seminars in Perinatology. 2(4):373-381; October 1978.

Psychological factors that health care providers should be alert to in caring for the pregnant diabetic woman are described. The often necessary prolonged periods of hospitalization may impose stresses caused by family separation and severe economic demands. Additionally, the woman with diabetes may be experiencing unresolved grief from previous pregnancy losses. The importance of minimizing the effects of these multiple stresses during the perinatal care period so as to realize the most favorable outcome of the pregnancy and of future parenting is stressed.

49. Serial Ultrasonography to Assess Evolving Fetal Macrosomia. Studies in 23 Pregnant Diabetic Women. E. S. Ogata; R. Saggabha; et al. Journal of the American Medical Association. 243(23):2405-2408; 20 June 1980.

Serial ultrasound estimates of fetal biparietal diameter and abdominal circumference were used as differential indices of intrauterine growth of insulin-insensitive and insulin-sensitive structures, respectively, in 23 White's classes A to C diabetic women. Biparietal diameter in all fetuses conformed to growth patterns for fetuses of nondiabetic mothers. However, two patterns were noted for abdominal circumference. Normal increases occurred in 13 fetuses; in the remaining 10, growth of abdominal circumference exceeded upper normal limits from weeks 28 to 32 of gestation onward. This latter group with putative "acccelerated somatic growth" in utero had more immunoreactive insulin in amniotic fluid, weighed more at birth, and had more subcutaneous fat. Serial differential ultrasonography may be useful for detecting evolving macrosomia in diabetic pregnancies, and fetal insulin or insulin-like principles may contribute to the macrosomia. (AA)

50. When a Pregnant Woman Is Diabetic: A Case Study. K. Schuler; D. Wimberley; N. Rancilio; M. Vogel. American Journal of Nursing. 79(3):456-459; March 1979.

This case study of a 22-year-old woman with gestational diabetes traces her medical history and treatment during pregnancy. Although

classified as a White class A diabetic managed by diet alone at the time pregnancy was confirmed, she was later reclassified as a class B requiring insulin. Administration of increasing insulin dosage until the 37th week of pregnancy was found necessary. Tests were performed regularly to monitor both mother and fetus. Labor was induced when a pattern of late fetal heart decelerations was detected. Complications after delivery were the inability of the infant to nurse sufficiently and jaundice. Both were treated successfully.

51. When a Pregnant Woman Is Diabetic: Antepartal Care. K. Schuler. American Journal of Nursing. 79(3):448-450; March 1979.

The physiological and psychological manifestations of pregnancy in women with diabetes are considered. Adjustments in the treatment of the disease are traced through the course of each trimester. The White classification of diabetes in pregnancy is outlined.

52. When a Pregnant Woman Is Diabetic: Care of the Newborn. M. Vogel. American Journal of Nursing. 79(3):458-460; March 1979.

The nurse's thorough understanding of the assessment process and the ability to apply this understanding quickly are seen as the key to good nursing care of the infant born to a mother with diabetes. Knowledge of the mother's labor and delivery record--which includes her diabetic classification, the infant's gestational age, and tests to be done on the cord blood--is crucial; but even more important is direct observation of the infant.

53. When a Pregnant Woman Is Diabetic: Intrapartal Care. D. Wimberley. American Journal of Nursing. 79(3):451-452; March 1979.

Diabetic control during labor is addressed in this article. Nursing procedures outlined include checking the urine for sugar and acetone, giving insulin as prescribed, watching for signs of hypoglycemia or hyperglycemia, drawing the blood sugar before start of induction and at least once during labor, and monitoring the flow rate of the I.V. Psychological support of the patient is also discussed.

54. When a Pregnant Woman Is Diabetic: Postpartal Care. N. Rancilio. American Journal of Nursing. 79(3):453-456; March 1979.

Four nursing interventions required by postpartal women with diabetes are explained: prevention of postpartal complications; maintenance of normal blood glucose levels; formulation of birth control plans; and development of a positive mother-child relationship. A plan for care is presented in chart format listing diagnostic, therapeutic, and educational interventions for the nurse.

55. Workshop on Diabetes and Pregnancy. S. D. Garvey. St. Louis: Monoject; 1977. 12 p.

Written by a diabetes nurse clinician, this outline lists major topics and subtopics to be covered in a nursing workshop on diabetes and pregnancy. Main topics include interpretation of glucose tolerance tests in pregnancy, classification of maternal diabetes, gestational diabetes, the effects of pregnancy on the diabetic state, indications of fetal distress, determination of the delivery date, indications for interruption of pregnancy, and characteristics of newborns. The outline also emphasizes the importance of counseling and support from the medical team during a diabetic pregnancy. A bibliography is provided.

Price: Free.

Source: Monoject; Division of Sherwood Medical; 1831 Olive Street; St. Louis, MO 63103. (314) 621-7788.

56. Antenatal Management of the High Risk Obstetric Patient [Slide-tape]. D. G. Kinne; et al. Ann Arbor: University of Michigan Medical Center, Biomedical Media Production Unit; 1973. 77 slides; color; 2 x 2 in. Accompanied by: 1 cassette, 17 min.

This program discusses and illustrates with clinical examples the antenatal management of the high risk obstetric patient. Details from the patient's medical, family, and obstetric history which may indicate the patient is at high risk are identified. Parameters of care are discussed: assessment of fetal growth and maturity, assessment of fetal health, serial clinical evaluation, appropriate consultation, timing of the delivery, method for the delivery, and choosing the appropriate location for the delivery. The plan is applied to three pregnant women, one diabetic since age 17. Determination of gestational age, criteria for determining pulmonary maturity, and the use of x-ray, amniocentesis, and ultrasound to determine fetal maturity are also discussed. (UM-M)

EVALUATION: AVLINE: Recommended.

Price: Loan: $25.00/week; Sale: $75.00.

Source: University of Michigan; Department of Postgraduate Medicine Media Library; Towsley Center for Continuing Medical Education; Box 57; Ann Arbor, MI 48109. (313) 763-2074.

57. Antepartal Nursing Care of High Risk Women: The Oxytocin Challenge Test [Videorecording]. Ohio State University. School of Nursing. Columbus: The University; 1977. 1 cassette; 11 min.; sd.; color; 3/4 in.

The program presents a definition of the Oxytocin Challenge Test (OCT), conditions it is used for, equipment needed for diabetic and nondiabetic patients, information to be given to the patient, how to position the patient, needed baseline data, information about the monitor and baseline tracing, how to start the IV and pitocin, rate of infusion, and discontinuance of the test in the event of maternal or fetal problems. (AVLINE-M)

EVALUATION: Although the presentation is generally well done, there are no objectives and the risks of the procedure are not listed. Recommended with reservations. Reviewer: Association of American Medical Colleges (AAMC), Apr. 1979.

Price: Loan: $25.00/week; Sale: Price quoted upon request.

Source: Ohio State University; Medical Audio-Visual and Television Center; 1583 Perry Street; Columbus, OH 43210. (614) 422-3323.

58. The Client's Perceptions During High Risk Pregnancy and Child Birth [Videorecording]. Ohio State University. School of Nursing. Columbus: The University; 1977. 1 cassette; 33 min.; sd.; color; 3/4 in.

An interview is presented with a client who has been classified as having a high risk pregnancy because she is diabetic. (AVLINE-M)

EVALUATION: Although the presentation is generally well done, the locale is highly specialized with only one client used. Recommended with reservations. Reviewer: Association of American Medical Colleges (AAMC), Apr. 1979.

Price: Loan: $35.00/week; Sale: Price quoted upon request.

Source: Ohio State University; Medical Audio-Visual and Television Center; 1583 Perry Street; Columbus, OH 43210. (614) 422-3323.

59. Clinical Problems During Pregnancy, Part I: Environmental Factors [Videotape]. R. Cash. Chicago: University of Illinois; 1975. 1 cassette; 27 min.; sd.; color; 3/4 in.

This program presents the clinical problems that arise during pregnancy as a result of environmental factors. Maternal diabetes, hemolytic disease, infectious agents, radiation, and chemical agents are discussed. Selected conditions are illustrated. Part 1 of two parts. (UM)

EVALUATION: AVLINE: Highly recommended.

Price: $270.00.

Source: AudioVisual Concepts, Incorporated; 1525 East 53rd Street, Suite 431; Chicago, IL 60615. (312) 947-8889.

60. The Complicated Pregnancy [Slide-tape]. Tucson: Medical Electronic Educational Services; 1975. 45 slides; color; 2 x 2 in. Accompanied by: 1 cassette, 19 min., and guide.

The program focuses on five factors causing bleeding during pregnancy, their incidence, and the stages of pregnancy in which they occur. Complications of pregnancy covered include its effect on anemia, urinary tract infection, diabetes, and conditions due to a history of rheumatic fever. (UM)

Price: $110.00.

Source: Medical Electronic Educational Services; 1802 West Grand Road, Suite No. 119; Tucson, AZ 85705. (602) 624-4401.

61. The Complicated Pregnancy [Sound recording]. M. Thompson. Glendale: Audio Digest Foundation; 1976. 1 cassette; 19 min.

The problems of acute hypertension and diabetes mellitus in pregnancy and the differences between overt and latent diabetes are described. Gestational diabetes, manifesting abnormal glucose tolerance tests during pregnancy and reversion to normal glucose tolerance after delivery, is discussed with diagnostic pointers. Classification of diabetes based upon time of diagnosis and related complications is defined. Management aspects of pregnancy for the woman with diabetes, including caloric determination, insulin requirements, and evaluation of the patient for method of delivery, are covered. (UM-M)

Price: $6.00.

Source: Audio Digest Foundation; 1577 East Chevy Chase Drive; Glendale, CA 91206. (213) 240-7500.

62. Complications of Pregnancy: Diabetes Mellitus [Motion picture]. Chicago: Video Nursing; 1971. 1 reel; 30 min.; sd.; 16 mm.

The medical and nursing management of a pregnancy complicated by diabetes is presented. The patient is interviewed by a physician, a nurse, and a dietitian, and aspects of care are reviewed. (UM)

Price: Loan: $35.00/1 day; Sale: $300.00.

Source: American Journal of Nursing; Film Library; c/o Association Films, Inc.; 600 Grand Avenue; Richfield, NJ 07657. (201) 943-8200.

63. Diabetes: A Special Problem in Pregnancy [Slide-tape]. J. Schneider. Ann Arbor: The University; 1978. 55 slides; color; 2 x 2 in. Accompanied by: 1 cassette, 15 min., and guide.

The risks to the fetus and newborn brought about when diabetes mellitus complicates pregnancy are detailed. (AVLINE-M)

EVALUATION: The presentation is well done and coherent. Recommended. Reviewer: Association of American Medical Colleges (AAMC), Feb. 1979.

Price: Loan: $25.00; Sale: $75.00.

Source: University of Michigan; Media Library; R 3489 Kresge 1; Ann Arbor, MI 48109. Attention: Francis Seefeld. (313) 763-2074.

64. Diabetes and Pregnancy [Videorecording]. W. N. Long. Emory University. School of Medicine. Georgia Regional Medical Television Network. Atlanta: Georgia Regional Medical Television Network; 1974. 1 cassette; 27 min.; sd.; black and white; 3/4 in.

Diabetes mellitus as a complication of pregnancy and pregnancy as a complication of diabetes are reviewed. Management of diabetes during pregnancy is discussed in detail. (UM)

Price. Loan: $30.00; Sale: $95.00.

Source: A.V. Department; A. W. Calhoun Medical Library; Woodruff Memorial Building; Emory University; Atlanta, GA 30322. (404) 329-5817.

65. Diabetes in Pregnancy [Sound recording]. D. W. Cudmore. London, Ontario: College of Family Physicians; 1979. 1 cassette; 12 min. (Medifacts, Vol. 9, No. 4).

To properly diagnose gestational diabetes, the physician must know if the laboratory is measuring true venous blood or plasma; that class A (gestational) diabetes can be diagnosed by using the glucose tolerance test; and that women who have a family history of diabetes, have previously had large or stillborn infants, or have glucosuria when not pregnant should be tested for diabetes. The management of the pregnant woman with diabetes, risks for the infant with diabetes, and the need for fetal monitoring are also discussed. (UM-M)

Price: $2.50.

Source: University of Western Ontario; College of Family Physicians of Canada; Canadian Library of Family Medicine; Medical Building; London, Ontario N6A 5C1. (519) 679-2111.

66. Diabetes in Pregnancy [Sound recording]. W. N. Spellacy. Chicago: American College of Obstetricians and Gynecologists; 1976. 1 cassette; 60 min.

Until the availability of insulin, diabetic women were often anovulatory and the frequency of miscarriage was unusually high. The death rates for both mothers and infants were 50 percent. Now women are able to carry pregnancies to term, but there is a 6 percent rate of congenital anomalies, a 25 percent rate of toxemia of pregnancy, and frequent polyhydramnios. Problems in detecting mothers without overt diabetes are explored. The complications of pregnancy in insulin-dependent mothers are discussed as well as the increased risk of respiratory distress and hypoglycemia in the newborn. The timing and method of delivery are covered in terms of reducing perinatal deaths. (UM)

Price: $15.00.

Source: Medical Information Systems; 185 Great Neck Road; Great Neck, NY 11021. (516) 466-3711.

67. Diabetes in Pregnancy [Sound recording]. G. J. M. Tevaarwerk. London, Ontario: College of Family Physicians; 1978. 1 cassette; 6 min. (Medifacts, Vol. 8, No. 2).

This program reviews a study in which the pregnancies of 93 women with diabetes (both overt and gestational) were monitored. The team approach to perinatal care was used; an endocrinologist, an obstetrician, a neonatologist, a family physician, and the staff of a hospital diabetes education center formed the team. Multiple dose insulin therapy was used to control blood sugar levels. The results of the study indicated that pregnancy outcome in terms of perinatal morbidity and mortality was basically the same as in the nondiabetic population. (UM-M)

Price: $2.50.

Source: University of Western Ontario; College of Family Physicians of Canada; Canadian Library of Family Medicine; Medical Building; London, Ontario N6A 5C1. (519) 679-2111.

68. Diabetes in Pregnancy [Sound recording]. J. E. A. Tyson. Baltimore: Johns Hopkins University, School of Medicine; 1976. 1 cassette; 16 min. Accompanied by: booklet; ill. Packaged with: Diabetic Retinopathy. (Highlights of Topics in Clinical Medicine: Diabetes Mellitus).

Criteria are outlined for testing abnormal carbohydrate metabolism in pregnancy. Routine screening of all pregnant women for the possibility of diabetes is recommended, and relative values for the oral

glucose tolerance test are cited. An alternate method for diagnosing gestational diabetes is also discussed. Diabetic insulin requirements during various periods of pregnancy are outlined. Determination of delivery time based upon urinary estriol concentration is explained. An addendum reviewing the therapy and etiology of diabetes is presented. (UM-M)

Price: $25.00/series.

Source: Johns Hopkins Medical Institutions; Office of Continuing Education; Audiovisual Programs; 1721 East Madison Street; Turner Auditorium Building; Baltimore, MD 21205. (301) 955-3988.

69. Diabetes in Pregnancy [Videorecording]. E. J. Quilligan. Academy of Health Sciences. Fort Sam Houston, TX: The Academy; 1973. 1 cassette; 29 min.; sd.; color; 3/4 in.

The University of Southern California's program for the pregnant diabetic is discussed in terms of diabetic screening requirements, methods of screening, and control of diabetogenic effects of pregnancy. A full description of the monitoring of class A and class B-F diabetics is also given with emphasis placed on estriol monitoring, frequent FBS drawing, and the oxytocin challenge test. The speaker notes that although the monitoring system used at U.S.C. is expensive, the benefits of decreased fetal loss justify this type of intensive treatment. The advantages as well as problems encountered in this system are also described. A study on the significant decrease in estriol excretion of pregnant women in relation to assay frequency is described. Additional topics discussed are timing of delivery (both from A and B-F diabetics), intrapartum and neonatal management, and the prognosis for gestational diabetes. A short summary is included. (AVLINE-M))

EVALUATION: Recommended. Reviewer: Association of American Medical Colleges (AAMC), Oct. 1974.

Price: Free to health professionals if a blank tape is provided. Order No.: CME 267.

Source: Academy of the Health Sciences; U.S. Army; AHS-TV; Health Sciences Media Division; Fort Sam Houston, TX 78234. (512) 221-2651.

70. Endocrine and Metabolic Diseases in Pregnancy. Management of the Diabetic and Prediabetic Woman [Sound recording]. J. B. Josinovich. Glendale, CA: Audio-Digest Foundation; 1978. 1 cassette; 18 min. (Obstetrics and Gynecology, Vol. 25, No. 7, Side A).

Guidelines are given for managing the diabetic and prediabetic woman. Regulating insulin requirements during pregnancy, monitoring blood glucose in early pregnancy, and maintaining a blood glucose level

between 9 and 150 mg/100 ml are recommended. Genetic counseling of the pregnant diabetic, determining gestational age and fetal size, reducing the possibility of congenital anomalies, using L/S ratios to determine fetal maturity, and evaluating urinary estriol levels are also discussed. (UM)

Price: $6.00.

Source: Audio-Digest Foundation; 1577 East Chevy Chase Drive; Glendale, CA 91206. (213) 240-7500.

71. Gestational Diabetes Mellitus [Sound recording]. R. J. Carpenter. Glendale, CA: Audio-Digest Foundation; 1979. 1 cassette; 16 min. (Obstetrics and Gynecology, Vol. 26, No. 5, Side A).

The basic principles of managing the woman with gestational diabetes are careful management before and early in pregnancy; careful diabetic and obstetric management throughout pregnancy, labor, and the puerperium; and careful continuing newborn care. This program discusses variable mechanisms of insulin and other hormones during gestation; diagnosis of gestational diabetes using the overnight fasting blood glucose test, the two-hour postprandial blood glucose test, and the glucose tolerance test; the signficance of glycosuria in pregnancy; glucose tolerance test restrictions; and the need for frequent blood glucose monitoring in pregnancy. (UM)

Price: $6.00.

Source: Audio-Digest Foundation; 1577 East Chevy Chase Drive; Glendale, CA 91206. (213) 240-7500.

72. Hypoglycemia in the Newborn [Slide-tape]. Atlanta: National Medical Audiovisual Center; 1973. 80 slides; color; 2 x 2 in. Accompanied by 1 cassette; 20 min.; script.

This program defines the lower limits of normal blood glucose in quantitative terms. Four groups of infants at risk of developing hypoglycemia are identified. Diagnostic criteria are outlined, and seven diseases associated with symptomatic hypoglycemia are discussed. Screening procedures and management are included in the coverage. (UM)

Price: $25.75. Order No.: 007035.

Source: National Audiovisual Center; General Services Administration; Order Section; Washington, DC 20409. (301) 763-1896.

73. Identification and Evaluation of the High Risk Obstetric Patient [Slide-tape]. D. G. Kinne; et al. Ann Arbor: University of Michigan Medical Center, Biomedical Media Production Unit; 1973. 64 slides; color; 2 x 2 in. Accompanied by: 1 cassette; 13 min.; student guide.

Through the use of clinical subjects, graphs, karyotypes, charts, and histologic slides, this program presents a method of identifying and evaluating high risk obstetric patients (women under the age of 15 or over the age of 35, and women with hypertension or diabetes mellitus). The clinical evaluation of the fetus with the L/S ratio, amniotic fluid analysis, x-ray, and ultrasound is described. Routine laboratory tests performed during the first obstetrical visit on all patients considered to be at risk for gestational diabetes are discussed: complete blood count, urinalysis and screening culture, blood type, rH and antibody screen, serology, tuberculosis screening, cervical pap smear, and 2-hour postprandial blood sugar. (AVLINE-M)

EVALUATION: AVLINE: Recommended.

Price: Loan: $25.00/week; Sale: $75.00.

Source: University of Michigan; Department of Postgraduate Medicine Media Library; Towsley Center for Continuing Medical Education; Box 57; Ann Arbor, MI 48109. (313) 763-4156.

74. The Infant of the Diabetic Mother [Sound recording]. S. H. Pierog. Glendale, CA: Audio-Digest Foundation; 1979. 1 cassette; 6 min. (Obstetrics and Gynecology, Vol. 26, No. 5, Side B).

Guidelines for managing the infants of diabetic mothers are: (1) deliver in a perinatal center; (2) monitor the infant in a neonatal intensive care unit so that the infant's temperature can be regulated and early feeding can be closely supervised; (3) treat hypoglycemia in the newborn by obtaining blood glucose levels using glucagon and 20 to 25 percent glucose before establishing an IV and administering ACTH, prednisone, or hydrocortisone. (UM-M)

Price: $6.00.

Source: Audio-Digest Foundation; 1577 East Chevy Chase Drive; Glendale, CA 91206. (213) 240-7500.

75. Infants of Diabetic Mothers [Slide-tape]. E. James. Columbia, MO: The Group; 1976. 29 slides; color; 2 x 2 in. Accompanied by: 1 cassette; 9 min.

Potential problems that may develop in infants of diabetic mothers are discussed. Information concerning identifying infants at risk is presented along with the pathogenesis of some of the problems. The symptoms and management of hypoglycemia are also considered. (AVLINE-M)

EVALUATION: The presentation contains several deficiencies including a lack of clearly stated objectives, superficiality of content, and a failure to include information concerning the incidence or prevalence of the various problems. Recommended with reservations. Reviewer: Association of American Medical Colleges (AAMC), Aug. 1978.

Price: $22.80.

Source: University of Missouri, Columbia; Medical Center; Educational Resources Group; M 741 Medical Center; Columbia, MO 65201. (314) 882-6172.

76. Management of the Pregnant Diabetic [Videorecording]. M. Freedman. Fort Sam Houston, TX: Academy of Health Sciences; 1973. 1 cassette; 19 min.; sd.; color; 3/4 in.

The results of a study of 52 patients (class A, B, & C diabetics according to the White classification) are presented. Case histories of 5 class C diabetics who had frequent 24-hour urinary estriol tests during the course of their pregnancies are reviewed. The physician's dilemma is premature delivery versus fetal demise, usually due to hyaline membrane disease. In this study, frequent lecithin phosphorous level determinations were made by amniocentesis to find a correlation between lecithin levels and pulmonary maturity. The author suggests that timed delivery of diabetic mothers by induced labor or cesarean section is prudent but should wait until adequate pulmonary development can be determined. (UM-M)

Price: Free to health professionals if a blank tape is provided.
Order No.: CME 228.

Source: Academy of the Health Sciences; U.S. Army; AHS-TV; Health Sciences Media Division; Fort Sam Houston, TX 78234. (512) 221-2651.

77. Maternal Diabetes [Slide-tape]. P. C. Reddin. University of Missouri, Columbia. Medical Center. Educational Resources Group. Columbia: The Group; 1973. 21 slides; color; 2 x 2 in. Accompanied by: 1 cassette, 27 min., and script.

The interrelationship between pregnancy and diabetes is discussed, including both overt and gestational diabetes, identification and diagnosis, fetal problems, and methods of managing both the diabetes and the delivery. Also included are comparative data collected from cases at the University of Missouri and the University of Iowa. (ERG)

Price: $22.80.

Source: University of Missouri, Columbia; Medical Center; Educational Resources Group; M 741 Medical Center; Columbia, MO 65212. (314) 882-6172.

78. Obstetric Management of the Pregnant Diabetic [Audiocassette]. Glendale, CA: Audio-Digest Foundation; 1979. 1 cassette; 6 min. (Obstetrics and Gynecology, Vol. 26, No. 5, Side B).

The program discusses the obstetric management of the pregnant woman with diabetes. The first segment reviews the classifications of diabetes (classes A-F) and discusses the management of the class A diabetic, stating that (1) the preterm delivery of a class A (gestational) diabetic is not recommended; (2) a class A patient with a previous stillbirth should be managed as a class B diabetic (one with an onset age over 20 years and a disease duration less than 10 years); (3) cesarean section should be considered for delivery of a macrosomic fetus. The remainder of the program discusses management of class B-F diabetics and covers the following topics: prenatal assessment; early hospitalization; blood sugar monitoring; indications for therapeutic abortion; malignant retinopathy; and perinatal morbidity and mortality. (UM)

Price: $6.00.

Source: Audio-Digest Foundation; 1577 East Chevy Chase Drive; Glendale, CA 91206. (213) 240-7500.

79. Pregnancy and Diabetes [Sound Recording]. D. Younger. Madison: University of Wisconsin, Extension Service in Pharmacy; [n.d.]. 1 cassette; 20 min. Accompanied by: print materials.

The internist's role in the management of diabetes in pregnancy is described. Diabetogenic aspects of pregnancy are discussed, including increased insulin destruction by the placenta and decreased fasting maternal blood glucose levels. Seven classes of maternal diabetes, arranged according to increasing signs and symptoms present at the time of pregnancy, are described. The complications from and effects of diabetes on pregnancy are covered, including spontaneous abortions and congenital anomalies. The program concludes with the management and control of maternal diabetes, especially in regard to adjustment of drug therapy dosages. (UM)

Price: $50.00 for set of 8 tapes. Prepayment required.

Source: Drug Intelligence Publications, Inc.; 1241 Broadway; Hamilton, IL 62341. (217) 847-2504.

80. Pregnancy and Diabetes: A Team Approach for a Viable Neonate [Videorecording]. B. E. Metzger. New York: Network for Continuing Medical Education; 1972. 1 cassette; 15 min.; ed.; color; 3/4 in.

The factors that determine a successful pregnancy and an explanation of gestational diabetes and its treatment are discussed. A procedure for the screening of all pregnant women for diabetes is described.

A detailed discussion of the treatment of the pregnant woman with diabetes during the course of the pregnancy is shown, as well as a brief segment covering postnatal treatment for both the baby and the mother. (UM-M)

Price: Write for complete information.

Source: Network for Continuing Medical Education; 15 Columbus Circle; New York, NY 10023. (212) 541-8088.

81. Principles of Managing the Insulin-Dependent Pregnant Patient [Audiocassette]. B. B. Rothchild. Glendale, CA: Audio-Digest Foundation; 1979. 1 cassette; 20 min. (Obstetrics and Gynecology, Vol. 26, No. 5, Sides A and B).

The principles of managing the pregnancy of the woman with insulin-dependent diabetes are discussed. Subjects covered include the team approach to the pregnancy; goals of therapy; risks of ketoacidosis and ketonuria; specifics of diet therapy; regulation of insulin; management of adverse reactions; estriol determinations; L/S ratio; use of ultrasound; indications for hospitalization; delivery by cesarean section to avoid birth trauma if the infant is large; fetal monitoring in labor; insulin management during delivery; and detection of congenital malformations. The program reviews recent advances in decreasing perinatal mortality. (UM)

Price: $6.00.

Source: Audio-Digest Foundation; 1577 East Chevy Chase Drive; Glendale, CA 91206. (213) 240-7500.

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